UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------|----------------------|---------------------|------------------|
| 10/627,023 | 07/25/2003 | Zhi-Min Choo | 2060-3-54 | 3676 |
| 35884 7590 02/20/2008 LEE, HONG, DEGERMAN, KANG & SCHMADEKA 660 S. FIGUEROA STREET Suite 2300 | | | EXAMINER | |
| | | | TRAN, NHAN T | |
| | | | ART UNIT | PAPER NUMBER |
| LOS ANGEL. | LOS ANGELES, CA 90017 | | 2622 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | • | | 02/20/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|---|---|---------------|--|--|--|--|
| • | 10/627,023 | CHOO, ZHI-MIN | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| · | Nhan T. Tran | 2622 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | , | | | | | |
| 1) Responsive to communication(s) filed on <u>06 De</u> | | | | | | |
| ' = | · | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 25-28 and 31-39 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 25-28 is/are allowed. 6) ☐ Claim(s) 31-39 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) 🔲 Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | | |

10/627,023 Art Unit: 2622

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/6/2007 with respect to claims 31-39 have been considered but are most in view of the new ground of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (US 7,084,919) in view of Yoshida et al. (US 6,690,417).

Regarding claim 31, Shibata discloses a folding-type mobile communication terminal (foldable camera phone shown in Figs. 1-11 and abstract), comprising:

an upper body (20) comprising a display (21 in Fig. 1 and col. 9, lines 60-63);

a lower body (10) comprising a front side (the side where keypads are located as shown in Fig. 9) and a rear side (Figs. 3 & 7);

at least one terminal manipulation device (user control interface including the combination of keypads 17, mode switch 16, operation dial 34 and zoom switch 11 in Figs. 3 & 9; col. 10, lines 4-20);

Application/Control Number:

10/627,023 Art Unit: 2622

a hinge (31 in Figs. 1 & 3) configured to connect the lower body with the upper body, wherein the hinge is located at an end portion of an end side of the lower body (col. 9, lines 64-65), wherein the end side is located between the front and rear sides (Fig. 3);

an zoom camera (indicated by lens 33 in Figs. 2 & 3) coupled to a lateral side of the hinge and positioned to face outward from the lateral side of the hinge, wherein zooming of the zoom camera is performed responsive to user manipulation of the terminal manipulation device (zoom switch 11 is used to control zooming of the camera; see col. 10, lines 15-20 and col. 12, lines 25-27).

Although Shibata discloses a zoom camera as mentioned above, Shibata is just silent about an optical zoom. However, as taught by Yoshida, a foldable camera phone is implemented with an optical zoom camera (108 in Figs. 1 & 2) to allow the user to manually control movement of zoom lens to vary magnification ratio as desired (see Yoshida, col. 7, lines 26-34). Such optical zoom would produce a better enlarged image without reducing image resolution in comparison to a digital zoom.

Therefore, it would have been obvious to one of ordinary skill in the art to provide an optical zoom system in the camera phone in Shibata in view of the teaching Yoshida so as to allow the user to manually control movement of zoom lens vary magnification ratio without reducing image resolution in comparison to a digital zoom, thereby maintaining high image quality during zooming.

Application/Control Number:

10/627,023 Art Unit: 2622

Regarding claim 32, as mentioned in claim 1, Shibata discloses the terminal manipulation device which is located on the front side of the lower body (see Fig. 9, wherein at least the mode switch 16 and keypads 17 are located on the front side of the lower body 10).

Regarding claim 33, Shibata also discloses that the terminal manipulation device (operation dial 34 in Fig. 3) positioned on the hinge.

Regarding claim 34, as clearly seen in Fig. 9 of Shibata, an input device (keypads 17) is located on the front side of the lower body.

Regarding claim 35, this claim is also met by the combined teaching of Shibata and Yoshida as analyzed in claim 31, wherein the photographing apparatus is indicated by the camera behind the lens (33). Shibata in view of Yoshida further discloses an inherent image sensor, a lens (33) positioned relative to the image sensor (see Shibata, col. 10, lines 4-20), a positioning mechanism providing optical zooming by causing relative motion between the lens and the image sensor responsive to user manipulation of the terminal manipulation device (see Yoshida, col. 7, lines 26-34).

Regarding claim 36, see the analysis of claim 31.

Application/Control Number:

10/627,023 Art Unit: 2622

Regarding claims 37-39, these claims are also met by the analyses of claims 32-34, respectively.

Allowable Subject Matter

4. Claims 25-28 are allowed.

The reason for allowance can be found in the Office Action mailed 7/6/2007.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10/627,023 Art Unit: 2622

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NHAN T. TRAN
Patent Examiner